REMARKS

Claims 24-25 are pending in the present application.

The rejections of: (a) Claims 20-21 under 35 U.S.C. §103(a) over Davis et al (US 4,480,066) in view of Takahashi et al (US 4,891,267); (b) Claims 20-21 under 35 U.S.C. §103(a) over Beck (US 5,085,905); (c) Claims 22-23 under 35 U.S.C. §103(a) over Davis et al (US 4,480,066) in view of Davis et al (US 4,376,868) and Orndorff, Jr. (US 4,331,496), and Claims 22-23 under 35 U.S.C. §103(a) over Beck (US 5,085,905) in view of Davis et al (US 4,480,066) and Orndorff, Jr. (US 4,331,496) are obviated by amendment.

The present invention relates to an article for a door window glassrun channel of a vehicle. In the present invention, a heat-treated adhesive layer comprising chlorinated rubber and chlorosulfonated polyethylene rubber is formed on the surface of a brass wire or a brass-plated steel wire, which enables a strong adhesion between the brass wire or the brass-plated steel wire and an elastomeric portion comprising an ethylene-propylene-diene ternary copolymer. The resulting effect is that longitudinal shrinkage is effectively prevented for a long period of time, which also allows in the ability to eliminate the gap that is present between a window frame and a glassrun channel. The formation of the gap pervades the currently employed state of the art as represented by the art of record.

For the Examiner's convenience, Applicants provide the following two illustrations so that the Examiner may obtain a better understanding of the present invention and the advantages flowing therefrom. In the first illustration (prior art), Applicants demonstrate the effect of longitudinal shrinkage on the glassrun channel and the window frame interface. Namely, the first illustration shows that as a result of the longitudinal shrinkage a gap is formed between the window frame and the glassrun channel. In contrast, in the second

illustration, Applicants demonstrate the effect of the present invention in which longitudinal shrinkage is prevented. Thus, no gap is formed between the window frame and the glassrun channel. Applicants submit that this effect is neither disclosed nor suggested by the art of record.

Illustration 1 (Prior Art) -

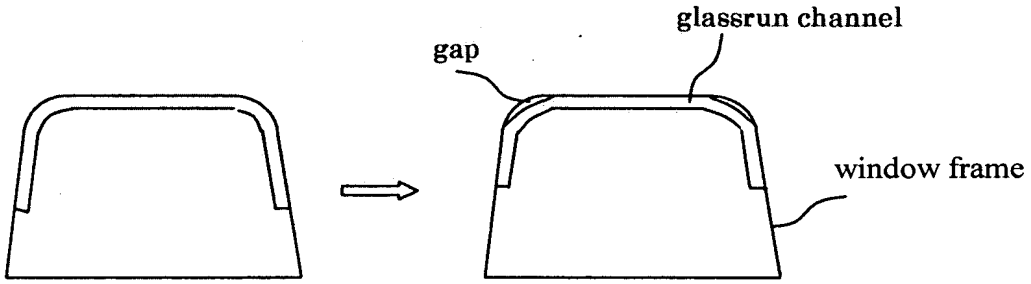
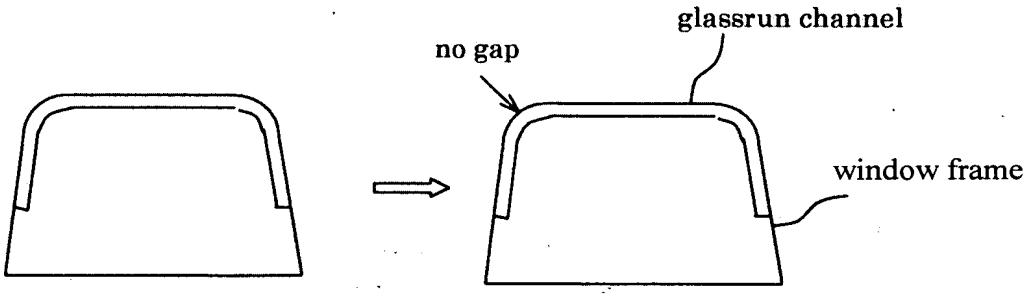


Illustration 2 (Present Invention) -



The Examiner is reminded of the legal standard for supporting a proper case of obviousness. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation... to modify the reference... Second, there must be a reasonable expectation of success. Finally, the prior art reference... must teach or suggest all the claim limitations." (MPEP §2142) Moreover, "Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention,

absent some teaching or suggestion supporting the combination. Under 103, teachings of references can be combined *only* if there is some suggestion or incentive to do so." (*In re Fritch* 23 USPQ2d 1780, 1783 (Fed. Cir. (1992)). For the following specific reasons, the combined disclosures (in any combination) of Davis et al (US 4,480,066), Takahashi et al (US 4,891,267), Davis et al (US 4,376,868), Orndorff, Jr. (US 4,331,496), and Beck (US 5,085,905) fail to meet either of these standards.

Davis et al (US 4,480,066) disclose a rubber composition having improved adhesion to a brass or a brass-plated metal, as well as articles containing the same (e.g., tires). The rubber compositions disclosed by Davis et al (US 4,480,066) contain chlorinated rubber and chlorosulfonated polyethylene rubber. However, Davis et al (US 4,480,066) do not disclose or suggest an elastomeric extrusion of ethylene-propylene-diene ternary copolymer around an outer periphery of the adhesive layer of chlorinated rubber and chlorosulfonated polyethylene rubber on a brass wire or a brass-plating steel wire in an article for a door window glassrun channel of a vehicle as presently claimed.

Moreover, Davis et al (US 4,480,066) disclose tires as articles, but do not disclose or suggest a door window glassrun channel of a vehicle. Applicants note that the remaining art of record does not compensate for this fundamental deficiency in the disclosure of Davis et al (US 4,480,066).

The Examiner cites Davis et al (US 4,376,868) as disclosing an EPDM rubber; however, this disclosure is extremely limited. Specifically, Davis et al (US 4,376,868) limit their disclosure of the EPDM rubber to being a component of a blend with a chlorinated rubber. However, Davis et al (US 4,376,868) do not disclose an elastomeric extrusion of ethylene-propylene-diene ternary copolymer around an outer periphery of the adhesive layer of chlorinated rubber and chlorosulfonated polyethylene rubber on a brass wire or a brass-

plating steel wire as presently claimed. Therefore, it is unclear what benefit this disclosure of Davis et al (US 4,376,868) would offer absent Applicants disclosure.

Orndorff, Jr. (US 4,331,496) relates to bearing assemblies and at no point discloses or suggests glassrun channels. As stated above, the present invention solves the existing problem in the art that a glassrun channel undergoes longitudinal shrinkage due to temperature fluctuations over extended periods of use. The solution offered by the present inventors involves forming a heat-treated adhesive layer comprising chlorinated rubber and chlorosulfonated polyethylene rubber on a brass wire or a brass-plating steel wire, followed by extrusion of an EPDM rubber around an outer periphery of the adhesive layer. Therefore, Orndorff, Jr. (US 4,331,496) fails to disclose the structure as well as any advantage flowing from the claimed invention. As such, regardless of what reference Orndorff, Jr. (US 4,331,496) is combined with of the art cited herein, it is clear that that combination of references fails to disclose or suggest all the limitations of the presently claimed invention.

Beck (US 5,085,905) discloses elastomers having improved adhesion to brass and merely makes reference to elastomers containing a chlorinated rubber. Beck (US 5,085,905) fails to disclose or suggest, however, forming a heat-treated adhesive layer comprising a chlorinated rubber and chlorosulfonated polyethylene rubber on a brass wire or a brass-plating steel wire. Further, the disclosure of Beck (US 5,085,905) is limited to tires, power transmission belts, conveyer belts, and hoses. At no point does Beck (US 5,085,905) disclose or suggest a glassrun channel.

Takahashi et al (US 4,891,267) is cited by the Examiner as disclosing a metal wire coated with a heat-treated adhesive layer to reinforce rubber materials and as providing motivation for the adhesive layer thickness. However, Takahashi et al (US 4,891,267) suffers

from the same deficiency as the references cited above. Namely, Takahashi et al (US 4,891,267) fail to disclose or suggest a glassrun channel.

In view of the foregoing, Applicants submit that absent the disclosure of the present invention there would be no motivation in the art to obtain and/or practice the presently claimed invention. As such, the art of record (in any combination) fails to meet the standard necessary to support even a *prima facie* case of obviousness.

Applicants request withdrawal of the rejections over the various combinations of Davis et al (US 4,480,066), Takahashi et al (US 4,891,267), Davis et al (US 4,376,868), Orndorff, Jr. (US 4,331,496), and Beck (US 5,085,905).

The rejection of Claim 20 under 35 U.S.C. §112, second paragraph, is obviated by amendment.

Applicants have canceled Claim 20 in the amendment above. As such, this ground of rejection is no longer believed to be tenable.

Withdrawal of this ground of rejection is requested.

Applicants submit that the present application is now in condition for allowance.

Early notification of such action is earnestly solicited.

Respectfully submitted,

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